



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/996,908	11/30/2001	Takashi Asahina	P21764	3252

7055 7590 06/17/2004

GREENBLUM & BERNSTEIN, P.L.C.
1950 ROLAND CLARKE PLACE
RESTON, VA 20191

EXAMINER

MERCADO, JULIAN A

ART UNIT	PAPER NUMBER
----------	--------------

1745

DATE MAILED: 06/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/996,908

Applicant(s)

ASAHINA ET AL.

Examiner

Julian Mercado

Art Unit

1745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 May 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) 2-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 31, 33 and 34 is/are rejected.
- 7) ☒ Claim(s) 32 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1-13-04, 2-28-02
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Art Unit: 1745

DETAILED ACTION

Election/Restrictions

Claims 2-30 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a non-elected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed May 30, 2004.

Applicant's election with traverse of Group IV is acknowledged. The traversal is on the ground(s) that there would be no serious burden on the examiner to consider the other inventions since the search for all the claimed inventions would be co-extensive. This is not found persuasive because as detailed in the prior Restriction Requirement, the non-elected Groups I, II and III recite features, e.g. a planar, crank-shaped or corrugated plate, respectively, which result in the claimed inventions to be both structurally and functionally mutually exclusive. A burdensome search is asserted to exist since each of the groups will require a separate search and consideration for each of its distinct features.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 1745

Claims 1, 31, 33 and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Edwards et al. (U.S. Pat. 4,603,093).

Regarding claims 1, 31, 33 and 34, Edwards et al. teaches a prismatic battery having a plurality of cell cases connected to one another through separation walls [24] with an electroconductive connector [45], i.e. "[e]ach wall contains an inter-cell connector such as a cylinder 45 of lead sealingly received in the upper portion of the wall 24". (col. 4 line 11-14) The electrode plate group includes positive [28] and negative [26] plates with separator [32] therebetween. (col. 4 line 14-16) Lead portions [40] project on one side portion of the plates in opposite directions, i.e.

the positive or negative sheet can be formed of a thin, light-weight substrate sheet 34 such as cast, expanded or perforated lead or lead alloy carrying a layer 36 of electrochemically active paste and having a strip 38 along one edge to which is attached a plurality of tabs or tigs 40". (col. 17-23)

Figure 3 shows that the lead portions [40] connect the plates to the electroconductive connector [45]. Sealing by way of foam pad [48] is provided between peripheral upper edges of each electrode group and the inner surface of the battery case or lid [12]. (col. 4 line 47-49, applies to claim 34)

As to claim 31, the lead portions are considered to include projections [54], i.e. "bends" which join together to form a raised portion [56]. (Figure 2, col. 4 line 41-49) The feature of a "raised portion" has been given its broadest reasonable interpretation in accordance with applicant's disclosure. To this extent, as shown in Figure 2, a raised portion [56] in Edwards et al. contacts the electroconductive connector [45]. (see Figure 3)

Allowable Subject Matter

Claim 32 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the prior art of record and to the examiner's knowledge do not teach or render obvious the instant invention regarding the electroconductive conductor formed as a pair of tapered connection surfaces in surface contact with a sloped surface of the raised portion of the lead portions.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Pat. 4,464,827 to Hardin is cited to teach tapered electroconductive conductors [18], however, to the extent that Hardin may read on the presently claimed invention, the conductors are not configured to form at least part of the separation wall as required by the present claims (specifically, as recited in claim 1 at lines 5-6).

Conclusion

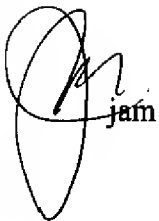
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julian Mercado whose telephone number is (571) 272-1289. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan, can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1745

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



jam



Patrick Ryan
Supervisory Patent Examiner
Technology Center 1700